

**Sunday River Skiway Corp.
Oxford County
Newry, Maine
A-634-71-F-R (SM)**

**Departmental
Findings of Fact and Order
Air Emission License**

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Sunday River Skiway Corp. (Sunday River) of Newry, Maine has applied to renew their Air Emission License permitting the operation of emission sources associated with their ski resort.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Electrical Generating Equipment

<u>Equipment</u>	<u>Power Output (kW)</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>
Diesel #1	1250	12.3	89.3	diesel, 0.05%
Diesel #2	1250	12.3	89.3	diesel, 0.05%
Diesel #3	1250	12.3	89.3	diesel, 0.05%
Diesel #4	1250	12.3	89.3	diesel, 0.05%
Diesel #5	1250	12.3	89.3	diesel, 0.05%
Diesel #6	1250	12.3	89.3	diesel, 0.05%
Diesel #7	1250	12.3	89.3	diesel, 0.05%
Diesel #8	1250	12.3	89.3	diesel, 0.05%

Back-up Ski Lifts Engines

<u>Engine</u>	Maximum Capacity		<u>Fuel Type,</u> <u>% sulfur</u>
	<u>(MMBtu/hr)</u>	<u>(Hp)</u>	
Lift #1	1.96	280	diesel, 0.05%
Lift #2	1.07	152	diesel, 0.05%
Lift #6	2.81	400	diesel, 0.05%
Lift #9	1.07	152	diesel, 0.05%
Lift #10	2.35	335	diesel, 0.05%
Lift #11	1.24	177	diesel, 0.05%
Lift #12	3.16	450	diesel, 0.05%
Lift #14	2.03	290	diesel, 0.05%
Lift #15	1.24	177	diesel, 0.05%

C. Application Classification

The application for Sunday River does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units only.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Diesel Units

Sunday River had proposed, through Air Emission License A-634-74-A-N, to install/operate diesel compressors #1 - #8 primarily for snowmaking during the ski season. Sunday River has yet to install these units, however, the facility has requested to renew the license for potential installation in the future. Diesel units #1 - #8 each have a maximum design heat input capacity of 12.3 MMBtu/hr and fire diesel fuel with a sulfur content not to exceed 0.05% by weight.

The regulated pollutants emitted from the diesel units are particulate matter (PM), particulate matter with a diameter smaller than ten microns (PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC).

Chapter 103 of the Department Regulations establishes a particulate matter limitation of 0.12 lb/MMBtu for new sources with a heat input capacity of less than 50 MMBtu/hr which met BACT for Air Emission License A-634-71-A-N and now is considered BPT for this renewal license.

BPT for the control of SO₂ emissions is the use of low sulfur fuel. Sunday River Skiway will fire diesel fuel with a sulfur content not to exceed 0.05% by weight.

Sunday River Skiway will control NO_x emissions by using a Selective Catalytic Reduction (SCR) system. The SCR system will reduce uncontrolled NO_x emissions by 80%, thus reducing 212.4 tons per year of uncontrolled NO_x emissions to 42.5 tons per year. The SCR system met BACT for Air Emission License A-634-71-A-N and now is considered BPT for this renewal license.

Sunday River Skiway will also monitor their SCR system. Sunday River shall keep monthly records of ammonia use and record all routine maintenance on their SCR system. Sunday River Skiway shall monthly inspect their SCR system and keep records of their inspections.

CO and VOC emissions will be controlled through good combustion practices which is BACT.

C. Lift Engines

Sunday River currently operates nine ski lift back-up engines.

“Emergency” is defined in Chapter 100 and throughout this document as: “... any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology based emission limitation under the license, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.”

Therefore, by definition, an engine used for load shedding purposes (also known as a “Dispatchable Load Generators”) is not considered an “Emergency Generator”. The emergency does not occur until offsite power is unavailable and

the generators supply power to bring emergency equipment on-line or to safely shut down equipment.

A summary of the BPT analysis for the back-up lift engines is the following:

1. Sunday River shall only fire diesel fuel in the back-up lift engines with a maximum sulfur content not to exceed 0.05% by weight.
2. The back-up lift engines shall each be limited to 300 hr/yr of operation based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all back-up lift engine operating hours.
3. Chapter 106 regulates fuel sulfur content, however in this case a BPT analysis for SO₂ determined a more stringent limit of 0.05% was appropriate and shall be used.
4. Chapter 103 regulates emissions of particulate matter, however in this case a BPT analysis for PM determined a more stringent limit of 0.08 lb/MMBtu was appropriate and shall be used. The PM₁₀ limits are derived from the PM limits.
5. NO_x, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
6. Visible emissions from each of the generators shall not exceed 20% opacity on a six (6)-minute block average, except for no more than two (2) six (6)-minute block averages in a continuous 3-hour period.

D. Annual Emissions

Sunday River shall be restricted to the following annual emissions, based on a 12 month rolling total:

Total Licensed Annual Emission for the Facility
Tons/year
(used to calculate the annual license fee)

	PM	PM₁₀	SO₂	NO_x	CO	VOC
Lift #1	0.1	0.1	0.1	1.3	0.3	0.1
Lift #2	0.1	0.1	0.1	0.7	0.2	0.1
Lift #6	0.1	0.1	0.1	1.9	0.4	0.2
Lift #9	0.1	0.1	0.1	0.7	0.2	0.1
Lift #10	0.1	0.1	0.1	1.6	0.3	0.1
Lift #11	0.1	0.1	0.1	0.8	0.2	0.1
Lift #12	0.1	0.1	0.1	2.1	0.5	0.2
Lift #14	0.1	0.1	0.1	1.3	0.3	0.1
Lift #15	0.1	0.1	0.1	0.8	0.2	0.1
Diesels #1 - #8	8.2	8.2	3.5	42.5	55.5	7.5
Total TPY	9.1	9.1	4.4	53.7	58.1	8.6

III.AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a minor source shall be determined on a case-by case basis.

Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-634-71-F-R subject to the following conditions:

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (Title 38 MRSA §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [MEDEP Chapter 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [MEDEP Chapter 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive

- dust, and shall submit a description of the program to the Department upon request. [MEDEP Chapter 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [MEDEP Chapter 115]
 - (6) The license does not convey any property rights of any sort, or any exclusive privilege. [MEDEP Chapter 115]
 - (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [MEDEP Chapter 115]
 - (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [MEDEP Chapter 115]
 - (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [MEDEP Chapter 115]
 - (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [MEDEP Chapter 115]
 - (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 2. pursuant to any other requirement of this license to perform stack testing.
 - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

- C. submit a written report to the Department within thirty (30) days from date of test completion.
[MEDEP Chapter 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- [MEDEP Chapter 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [MEDEP Chapter 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
[MEDEP Chapter 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall

prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [MEDEP Chapter 115]

(16) **Diesel Units**

- A. The Diesel Units #1 - #8 shall fire diesel fuel with a sulfur limit not to exceed 0.05% by weight. Compliance shall be based on fuel receipts from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel. [MEDEP Chapter 115, BPT]
- B. Sunday River shall operate and maintain SCR on the Diesel Units #1-#8. [MEDEP Chapter 115, BPT]
- C. Sunday River shall keep monthly records of ammonia use and record all routine maintenance on their SCR system monthly and keep records of inspections. [MEDEP Chapter 115, BPT]
- D. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Diesel #1 - #8 (each)	PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)

- E. Emissions shall not exceed the following [MEDEP Chapter 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Diesel #1 - #8 (each)	1.48	1.48	0.63	7.63	9.96	1.35

- F. Visible emissions from the Diesel Units shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [MEDEP Chapter 101]
- G. Should construction of the Diesel Units not commence by September 1, 2005, Sunday River shall reapply to the Department for approval to construct. [MEDEP Chapter 115]

(17) **Lift Engines**

- A. Sunday River shall limit the back-up lift engines to 300 hr/yr of operation each (based on a 12 month rolling total). [MEDEP Chapter 115, BPT]
- B. A log documenting the dates and times of operation for each of the back-up lift engines shall be kept. [MEDEP Chapter 115, BPT]
- C. The back-up lift engines shall fire only diesel fuel with a sulfur limit not to exceed 0.05% by weight. Fuel records, including percent sulfur, shall be maintained. [MEDEP Chapter 115, BPT]
- D. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Lift #12	PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)

- E. Emissions shall not exceed the following [MEDEP Chapter 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Lift #1	0.24	0.24	0.10	8.64	1.86	0.69
Lift #2	0.13	0.13	0.05	4.72	1.02	0.37
Lift #6	0.34	0.34	0.14	12.39	2.67	0.98
Lift #9	0.13	0.13	0.05	4.72	1.02	0.37
Lift #10	0.28	0.28	0.12	10.36	2.23	0.82
Lift #11	0.15	0.15	0.06	5.47	1.18	0.43
Lift #12	0.38	0.38	0.16	13.94	3.00	1.11
Lift #14	0.24	0.24	0.10	8.95	1.93	0.71
Lift #15	0.15	0.15	0.06	5.47	1.18	0.43

- F. Visible emissions from each of the back-up lift engines shall not exceed 20% opacity on a 6-minute block average, except for no more than 2 six-minute block averages in a continuous 3-hour period. [MEDEP Chapter 101]

- (18) Sunday River shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605).
- (19) **Annual Emission Statement**
In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:
- 1) A computer program and accompanying instructions supplied by the Department;
or
 - 2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

The emission statement must be submitted by September 1 or as otherwise specified in Chapter 137.

Sunday River Skiway Corp.
Oxford County
Newry, Maine
A-634-71-F-R

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**Departmental
Findings of Fact and Order
Air Emission License**

(20) Payment of Annual License Fee

Sunday River shall pay the annual air emission license fee within 30 days of July 31st of each year. Pursuant to Title 38-353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under section 341-D, subsection 3.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 1/28/04

Date of application acceptance: 1/28/04

Date filed with the Board of Environmental Protection: _____

This Order prepared by Lynn Ross, Bureau of Air Quality.